



U.S. Environmental Protection Agency
Coalbed Methane Outreach Program (CMOP)



2008

U.S. Coal Mine Methane Conference

October 28-30, 2008 • Omni William Penn Hotel • Pittsburgh, PA

*** AGENDA ***

Tuesday, October 28

8:00 AM *Registration*

8:30 AM **Welcome and Introduction**
Pamela Franklin, U.S. Environmental Protection Agency

Emerging Institutional Issues

Moderator: Pamela Franklin, U.S. EPA

8:45 AM **Analysis of Pending and Future Climate Change Legislation**
Vicki Arroyo, Pew Climate Center
• Warner-Lieberman and similar bills and their effect on Coal Mine Methane projects

9:30 AM **Update on EPA and Climate Issues**
Dina Kruger, U.S. EPA
• Proposed Mandatory GHG Reporting Rule

10:15 AM *Networking and Refreshment Break*

10:45 AM **Working with Mine Safety and Health Administration (MSHA)**
Erik Sherer, MSHA
• Special issues related to CMM projects at coal mines, including:

- Flaring
- Ventilation Air Methane (VAM)

11:30 AM **Market Opportunities for Flaring and Ventilation Air Methane Projects in the United States**
Jeffrey Liebert, Verdeo Group
Summary of technical options

- Permitting challenges
- Barriers to acceptance by the mines
- Role of voluntary, potential future compliance markets to incentivize projects

12:15 PM *Luncheon*

Tuesday, October 28 (Continued)

**Emerging Opportunities and Technologies:
Flaring and Ventilation Air Methane**
Moderator: Jayne Somers, U.S. EPA

- 1:45 PM **Special Challenges on Federal Lands**
William Radden-Lesage, U.S. Bureau of Land Management
- Issues related to ownership and leasing of coal mine methane on federally-managed lands
- 2:45 PM **Case Study: Mitigating Ventilation Air Methane**
Nicolas Duplessis, Biothermica
- Overview of Biothermica technology
 - Update on progress of project at JWR Mine No. 7
- 3:30 PM *Networking and Refreshment Break*
- 4:00 PM **Case Study: Results from the First U.S. Field Trial of Oxidation Technology for Coal Mine Ventilation Air Methane**
Deborah Kosmack, CONSOL Energy
- Windsor mine project results
 - Overview of field site visit
- 4:45 PM **Case Study: West Cliff Colliery's Ventilation Air Methane to Power Project**
Patrick Booth, BHP Billiton
Update on world's first commercial scale project converting ventilation air methane to electricity (Wollongong, Australia)
- 5:30 PM *Conclusion of Day One and Networking Reception*

We would like to thank the following sponsors for their generous support of this conference:

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DTE Methane Resources

Wednesday, October 29

8:30 AM **Welcome**
Barbora Jemelkova, U.S. EPA

8:35 AM **Review of Day One**
James Marshall, Raven Ridge Resources

Emerging Opportunities and Technologies: LNG Conversion *Moderator: James Marshall, Raven Ridge Resources*

8:45 AM **CMM to LNG Conversion Technology**
Mirosław Skrzypkowski, Ph.D., Prometheus Energy
Global opportunities
○ Case study of Project in Katowice, Poland

Emerging Opportunities and Technologies: Abandoned Mines and Surface Mines

9:30 AM **Overview of Opportunities at Abandoned Mines in the United States**
Jayne Somers, U.S. EPA
○ Methodological issues: what can be considered “emissions avoided”?
○ Project case studies and opportunities

10:15 AM *Networking and Refreshment Break*

10:45 AM **Overview of Project Opportunities at Surface Mines**
Michael Côté, Ruby Canyon Engineering, Inc.

11:30 AM **Emissions Reductions from Abandoned Mines and Surface Mines:
A Project Developer’s Perspective of the Opportunities and Hurdles to
Generating Carbon Credits**
Annika Colston, BlueSource

12:15 PM *Luncheon*

Navigating the Emerging Carbon Market: Translating Opportunities into Monetary Benefits *Moderator: Charlee Bergamo, Raven Ridge Resources*

1:30 PM **Analysis of Economically Viable Projects at US Coal Mines**
Barbora Jemelkova, U.S. EPA
○ Discussion of CMOP’s new online financial model for project-based cost-benefit analyses

2:00 PM **The Carbon Market Arena**
Anja Kollmus, Stockholm Environment Institute – US
○ Offsets, additionality, baselines, and what it means to be “under the cap”
○ Navigating different methodologies and standards

Wednesday, October 29 (Continued)

2:45 PM *Networking and Refreshment Break*

3:15 PM **Expert Panel Discussion:**
Financing CMM projects: Managing Carbon Finance in a Time of Uncertainty

Moderated by Dianne Rudo, Rudo International Advisors

Participants:

Clark Talkington, SCC Americas

Ben Patton, 3Degrees

Natalie Halich, International Finance Corporation

Kevin Lewis, EcoSecurities

Discussion topics include:

- Potential impact of new US administration on CMM sector
- How will US market converge with other markets?
- Uncertainty in international markets (post-2012)

4:45 PM **Closing Remarks**
U.S. EPA

5:00 PM *End of Day Two*

Thursday, October 30, 2008

SITE VISIT:
CONSOL Windsor Mine Technology Demonstration Project, West Liberty, WV
and
CNX Fallow Field Coalbed Methane / Gas Upgrade site, Washington County PA

8:00 AM Bus departs from Omni William Penn Hotel

9:30 AM Arrival and Tour of CONSOL Energy Windsor Mine Technology Demonstration Project, West Liberty, WV.
• Mitigation of simulated mine ventilation air methane (VAM) from an abandoned coal mine using MEGTEC Vocsidizer technology
• Site tour led by Deborah Kosmack, CONSOL Energy



11:00 AM Depart Windsor Mine

11:30 AM Arrival in Oglebay Park, Wheeling, WV

Lunch Break

12:30 PM Depart Oglebay Park

1:30 PM Arrival in Charleroi, PA and Tour of CNX Gas Upgrade Fallow Field Site
• CNX's Fallow Field plant is processing approximately 4-4.5 MMcfd from a network of pipelines which are connected roughly 20 producing CBM wells. The quality of the gas is approximately 93% methane, with CO₂ as the remainder. These stations boost the pressure from well head (10 psig) to roughly 70 psig. Guests will learn how the Fallow Field membrane plant serves two functions: it processes the gas (removes moisture and CO₂) and further compresses the gas from intermediate pressure to transmission pressure, in this case 600 psig. The manufacturer of the membrane separation process is Prosep, Technologies, based out of Houston, TX.



4:00 PM Depart CNX Gas Upgrade Site

5:00 PM Arrival at Omni William Penn Hotel

Capacity for the site visits is limited and space is available strictly on a first-come, first-reserved basis. A waiting list will be maintained once the site tour is sold out.

Note: All site tour attendees **MUST** wear long-sleeved shirts, long pants, and closed-toe shoes (no tennis shoes/sneakers allowed). Hard hats and safety glasses are required, and those will be provided to you on-site.

This site tour requires payment of a **\$25 fee**, which helps defray costs associated with the field trip, including a boxed lunch while en route.